

### ABSTRACT OF THE DISCLOSURE

To provide an integrated IP network containing therein a plurality of separated IP networks with a variety of characteristics, such as IP telephone network, IP video network, IP electronic text network, best effort network, IP data multicast network and IP-based TV broadcast network. In the integrated IP network there are virtually installed a plurality of IP networks with various features, such as IP telephone network, IP video network, IP electronic text network, best effort network, IP data multicast network and IP-based TV broadcast network. An address management table is set in each of the network node devices installed at input points through which the integrated IP network is accessed from outside. The address management table is registered beforehand with terminal addresses and port numbers identifying the application programs (AP) in the terminal. The address and port number written in the IP packet entered into the integrated IP network are compared with those registered in the address management table to route, inside the integrated IP network, the IP packet to an appropriate IP network. The port number may not be used and only the addresses may be compared.